

SAFETY & HEALTH NOTE

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Prevent Allergic Reactions to Natural Rubber Latex

Do you use latex gloves to perform your job? Or, are you exposed to latex products? If so, you may be at risk for developing a latex allergy.

Background

In June 1997, the National Institute for Occupational Safety and Health (NIOSH) issued an Alert *Preventing Allergic Reactions to Natural Rubber Latex in the Workplace*. This Alert warns that workers exposed to latex gloves and other products containing natural rubber latex may develop allergic reactions such as skin rashes, eye and nose irritation, asthma, and (rarely) shock. The following information is abstracted from this publication.

Latex rubber can contain proteins which cause a range of mild to severe allergic reactions. The chemicals added during processing of the latex rubber may also cause skin rashes. Several types of synthetic rubber which are also referred to as "latex," do not release the proteins that cause allergic reactions.

Reactions

Latex Allergy (immediate hypersensitivity) is a severe latex reaction. Certain proteins in latex may cause sensitization (positive blood or skin test, with or without symptoms). The amount of exposure needed to cause sensitization or symptoms is not known; however, even low levels can trigger allergic reactions in some sensitive individuals.

Allergic Contact Dermatitis (delayed hypersensitivity) results from chemicals added to latex during harvesting, processing, or

manufacturing. These chemicals can cause skin reactions similar to those caused by poison ivy. A rash usually appears 24 to 48 hours after contact and may progress to oozing skin blisters or spread away from the area of skin touched by the latex.

Irritant Contact Dermatitis is dry, itchy, irritated areas on the skin.

Reactions usually begin within minutes after exposure. However, they may occur hours to days later and produce various symptoms. Skin redness, hives, or itching are mild reactions. Respiratory symptoms, such as runny nose, sneezing, itchy eyes, scratchy throat, and asthma (difficult breathing, coughing spells, and wheezing) are more severe reactions. Shock rarely occurs. A life-threatening reaction is seldom the first allergic symptom. Latex allergic reactions have increased in recent years, especially among health care employees.

Routes of Exposure

The proteins responsible for latex allergies adhere to powder used on some latex gloves. When powdered gloves are worn, more latex protein reaches the skin. When gloves are changed, latex protein/powder particles are released into the air, where they may be inhaled. In contrast, work areas where only powder-free gloves are used show low levels or undetectable amounts of the allergy-causing proteins.

Recommendations

Knowledge and a common-sense approach are recommended to prevent latex allergy in the

workplace. For now, adoption of the following recommendations, where feasible, will contribute to exposure reduction and lower risk of latex allergy.

- Provide nonlatex gloves.
- Provide educational programs and training materials on latex allergy.
- Ensure good housekeeping practices to remove latex-containing dust from the workplace.
- Periodically screen high-risk workers for latex allergy symptoms. Detecting symptoms early and removing symptomatic workers from latex exposure are essential for preventing long-term health effects.
- After removing latex gloves, wash hands with a mild soap and dry thoroughly.

Additional Information

For additional information on latex allergy, read the [NIOSH Alert](#), *Preventing Allergic Reactions to Natural Rubber Latex in the Workplace*, June 1997.

The publication is available in hardcopy by calling NIOSH at 1-800-356-4674.

Other latex allergy information is available at the following web sites:

www.cdc.gov/niosh/latexalt.html

mediswww.cwru.edu/dept/anesth/lair/lair.htm

www.familyvillage.wisc.edu/lib_latx.htm

www.interlog.com/~polar/latex/latex.html



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